use at your facility as specified in this subpart.

§ 98.213 Calculating GHG emissions.

You must determine CO_2 process emissions from carbonate use in accordance with the procedures specified in either paragraphs (a) or (b) of this section.

(a) Calculate the process emissions of CO_2 using calcination fractions with Equation U–1 of this section.

$$E_{CO_2} = \sum_{i=1}^{n} M_i * EF_i * F_i * \frac{2000}{2205} \qquad \text{(Eq. U-1)}$$

Where:

E_{CO2} = Annual CO_2 mass emissions from consumption of carbonates (metric tons).
M_i = Annual mass of carbonate type i consumed (tons).
EF_i = Emission factor for the carbonate type i, as specified in Table U–1 to this subpart, metric tons CO_2/metric ton carbonate consumed.
F_i = Fraction calcination achieved for each particular carbonate type i (decimal fraction). As an alternative to measuring the calcination fraction, a value of 1.0 can be used.
n = Number of carbonate types.
2000/2205 = Conversion factor to convert tons to metric tons.

(b) Calculate the process emissions of CO_2 using actual mass of output carbonates with Equation U–2 of this section.

$$E_{CO_2} = \left[\sum_{k=1}^{m} \left(M_k * EF_k\right) - \sum_{j=1}^{n}\left(M_j * EF_j\right)\right] * \frac{2000}{2205} \qquad \text{(Eq. U-2)}$$

Where:

E_{CO2} = Annual CO_2 mass emissions from consumption of carbonates (metric tons).
M_k = Annual mass of input carbonate type k (tons).
EF_k = Emission factor for the carbonate type k, as specified in Table U–1 of this subpart (metric tons CO_2/metric ton carbonate input).
M_j = Annual mass of output carbonate type j (tons).
EF_j = Emission factor for the output carbonate type j, as specified in Table U–1 of this subpart (metric tons CO_2/metric ton carbonate input).
m = Number of input carbonate types.
n = Number of output carbonate types.

§ 98.214 Monitoring and QA/QC requirements.

(a) The annual mass of carbonate consumed (for Equation U–1 of this subpart) or carbonate inputs (for Equation U–2 of this subpart) must be determined annually from monthly measurements using the same plant instruments used for accounting purposes including purchase records or direct measurement, such as weigh hoppers or weigh belt feeders.

(b) The annual mass of carbonate outputs (for Equation U–2 of this subpart) must be determined annually from monthly measurements using the same plant instruments used for accounting purposes including purchase records or direct measurement, such as weigh hoppers or belt weigh feeders.

(c) If you follow the procedures of § 98.213(a), as an alternative to assuming a calcination fraction of 1.0, you can determine on an annual basis the calcination fraction for each carbonate consumed based on sampling and chemical analysis using a suitable method such as using an x-ray fluorescence standard method or other enhanced industry consensus standard method published by an industry consensus standard organization (e.g., ASTM, ASME, etc.).